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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,584	07/31/2001	Jin-Shan Wang	82817HEC	1795

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Paul A. Leipold
Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/918,584

Applicant(s)

WANG ET AL.

Examiner

Callie E. Shosho

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 19 April 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☒ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: 11.Claim(s) rejected: 1,10,12-18.

Claim(s) withdrawn from consideration: _____

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

Callie E. Shosho
Primary Examiner
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Attachment to Advisory Action

1. Applicants' arguments and 1.132 declaration have been fully considered but they are not persuasive.

Previously, applicants had argued that Sacripante et al. (U.S. 6,025,412) was not a relevant reference against the present claims given that Sacripante et al. is directed to ink jet inks including particles of a dye-polymer resin dispersed in a liquid vehicle and given that combining Sacripante et al. with Figuly (U.S. 5,136,014) would result in formation of particles of the dye-polymer resin wherein the resin is a hyperbranched polymer which is in direct contrast to the present invention which does not include particles.

In response, in the office action mailed 12/17/03, the examiner noted that the present claims only require hyperbranched polymeric dye comprising hyperbranched polymer having dye chromophore incorporated into polymer backbone and that there was nothing in the present claims that excluded the hyperbranched polymeric dye from being in the form of particles.

Subsequently, applicants have now submitted a further response as well as 1.132 declaration on 4/19/04.

Applicants argue that the hyperbranched polymer of the present invention does not form particles because it is water-soluble. As evidence to support this position, the 1.132 declaration shows that the hyperbranched polymers found in the examples of the present specification showed no measurable particle size in water.

As noted by applicants, the presently claimed hyperbranched polymers are not in the form of particles because they are water-soluble. However, there is no requirement in the present claims that the hyperbranched polymer is water-soluble. That is, the present claims are open to

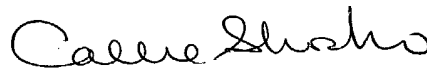
all hyperbranched polymers including those which are water-soluble and those which are not. While the declaration shows that the hyperbranched polymeric dyes of the present invention are water-soluble and thus, not in the form of particles, the fact remains that there is nothing in the present claims which excludes the hyperbranched polymer from being in the form of particles. Applicants argue that one would not look to Sacripante et al. to form claimed invention because Sacripante et al. is directed to formation of particles of a dye-polymer resin. However, the examiner disagrees with this position because there is nothing in the present claims which excludes hyperbranched polymeric dye in the form of particles or that requires that the hyperbranched polymer be water-soluble and thus, not in the form of particles. While the declaration shows that the hyperbranched polymers of the present invention are not in the form of particles, this data does not negate the fact that the present claims are open to any type of hyperbranched polymers including both those in the form of particles and those not.

In the declaration, applicants also compare ink comprising water-soluble hyperbranched polymer of the present invention with ink comprising polymer-dye particles. It is shown that the ink of the present invention is superior in terms of firability. However, the data does not establish unexpected or surprising results over the "closest" prior art Sacripante et al. given that there is no comparison between the present invention and that of Sacripante et al. In the comparative example, applicants use polymer-dye particles which are different than those disclosed in Sacripante et al. In the declaration, the comparative ink comprises polymer dye particles obtained from dye and polymer obtained from styrene, butyl methacrylate, divinylbenzene, and ethyl acetate while Sacripante et al. always require polymer obtained from one or more hydrophilic moieties such as carboxylic acid alkali salt, phosphate salt, etc. Thus, there is no

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comparison between present invention and that of the "closest" prior art because the declaration utilizes polymers different than that of the closest prior art. While the declaration shows polymer-dye in the form of particles produces ink with inferior firability, given that the polymer used is different in the comparative ink than that disclosed by Sacripante et al, it is not clear if the same results would be found when using polymer of Sacripante et al.

Additionally, there does not appear to be proper side-by-side comparison between ink within the scope of the present claims and those outside the scope of the present claims. That is, the comparative ink comprises 0.55% dye while the inventive ink comprises 5% polymeric dye. Thus, it is not clear if the difference in firability between the inventive ink and the comparative ink is due to the difference in the type of polymeric dye utilized in the ink or to the difference in amount of polymeric dye utilized in the ink.



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
4/28/04